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(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventors; and

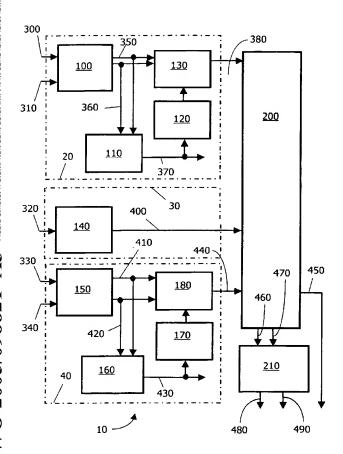
(75) Inventors/Applicants (for US only): BREEBAART, Dirk, J. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). SCHUIJERS, Erik, G., P. [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). HOTHO, Gerard, H. [NL/NL]; c/o Prof. Holstlaan 6,

NL-5656 AA Eindhoven (NL). **VAN LOON, Machiel, W.** [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

- (74) Agents: SLENDERS, Petrus, J., W. et al.; Prof. Holst-laan 6, NL-5656 AA Eindhoven (NL).
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### (54) Title: MULTI-CHANNEL ENCODER



(57) Abstract: There is described a multi-channel encoder (10) for processing input signals (300, 310, 320, 330, 340) conveyed in N input channels to generate corresponding output signals (480, 490) conveyed in M output channels together with complementary parametric data (370, 430, 450); M and N are integers wherein N>M. The encoder (10) includes a down-mixer for down-mixing the input signals (30, 310, 320, 330, 340) to generate the corresponding output signals (480, 490), the encoder also comprising an analyser for processing the input signals (300, 310, 320, 330, 340) to generate the parameter data (370, 430, 450), said parametric data describing mutual differences between the N channels of input signal to allow for regenerating during decoding one or more of the N channels of input signals from the M channels of output signal. Such an encoder (10) is capable of providing highly efficient data encoding and also of being backwards compatibility with relatively simpler decoders having fewer than N decoding output channels. The invention also concerns decoders compatible with such a multi-channel.

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